

Name _____

Chapter 9 Rocks and Minerals Review *Test is Tuesday December 6, 2016*

rock cycle

igneous rock

intrusive

crystal

nonfoliated

foliated

gem

ore

physical property

metamorphic rock

lava

sedimentary rock

mineral

pressure

extrusive

rock

1. _____ Any characteristic of a material that you cannot observe without changing the identity of the material

2. _____ molten rock material that exists at or above Earth's surface

3. _____ force applied over a given area

4. _____ an inorganic, solid material found in nature with a definite chemical composition.

5. _____ usually made up of two or more minerals

6. _____ the orderly pattern of atoms arranged in a repeating pattern within a mineral

7. _____ a mineral that contains enough of a useful substance to be sold for a profit.

8. _____ a mineral that is rare and can be cut and polished.

9. _____ rocks that form when melted rock material cools and hardens

10. _____ a type of rock made from pieces of other rocks, dissolved minerals, or plant and animal matter, that collect to form rock layers

11. _____ rocks that have little or no crystals and form on the surface of the Earth.

12. _____ rocks that have large crystals and form below the surface of the Earth.

13. _____ rocks that form when existing rocks are heated or squeezed under great pressure.

14. _____ rocks with visible layers of minerals.
15. _____ rocks with no visible layers or bands of minerals.
16. _____ a diagram of how rocks are recycled constantly from one kind of rock to another.
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Choose the best answer for each question:

- _____ 17. When do metamorphic rocks form?
- A. When layers of sediment are deposited
 - B. When lava solidifies in seawater
 - C. When particles of rock break off at Earth's surface
 - D. When heat and pressure change rocks
- _____ 18. Which of the following must be true for a substance to be considered a mineral?
- A. it must be organic
 - B. it must be glassy
 - C. it must be a gem
 - D. it must be naturally occurring.
- _____ 19. What kind of rocks are produced by volcanic eruptions?
- A. detrital
 - B. foliated
 - C. organic
 - D. extrusive
- _____ 20. Which is true about how all detrital rocks form?
- A. form from grains of preexisting rocks
 - B. form from lava
 - C. form from evaporation
 - D. form from plant remains
- _____ 21. Which of the following describes what rocks usually are composed of?
- A. pieces
 - B. minerals
 - C. fossil fuels
 - D. foliation
- _____ 22. How can sedimentary rocks be classified?
- A. foliated or nonfoliated
 - B. gems or ores
 - C. extrusive or intrusive
 - D. detrital, chemical, or organic

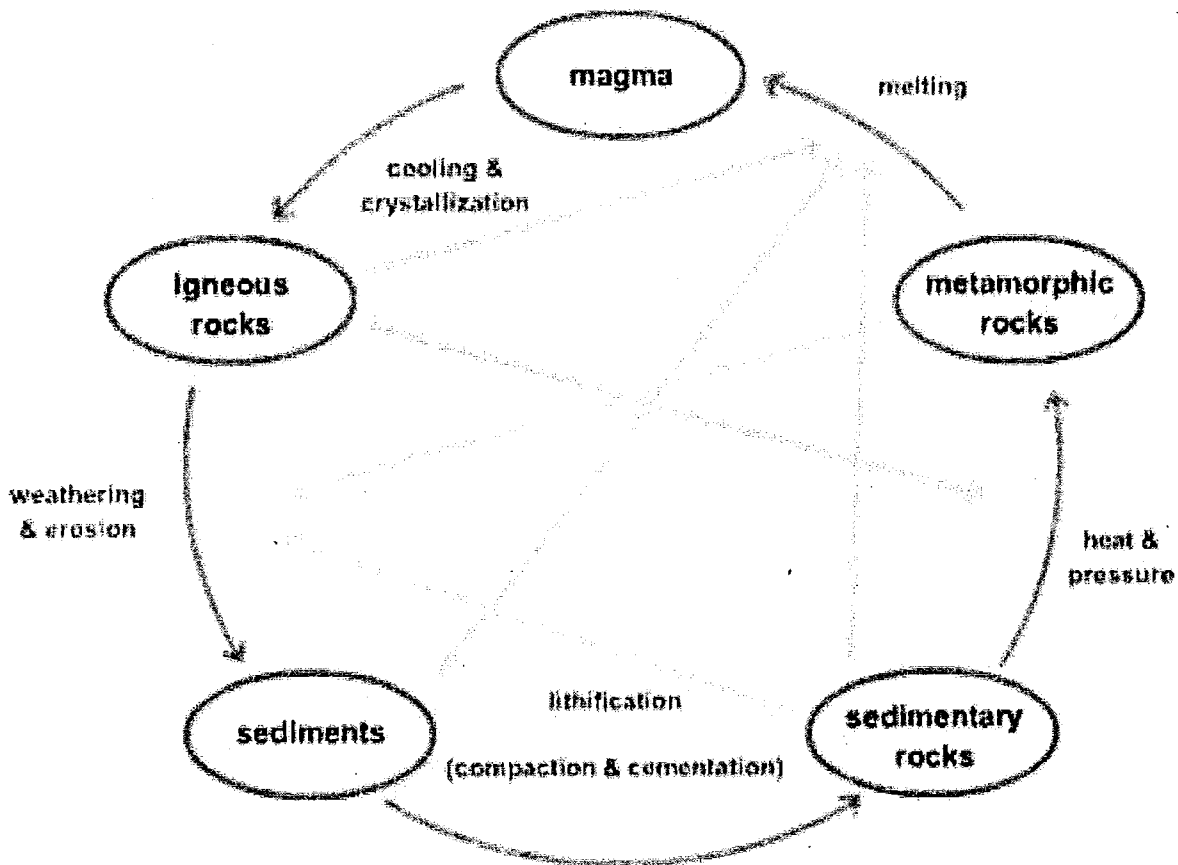
23. Which is true of all minerals?

- A. they are inorganic solids.
- B. They have a hardness of 4 or greater.
- C. They have a glassy luster
- D. They can scratch a penny

24. Which is the name for the color of a powdered mineral?

- A. hardness
- B. luster
- C. cleavage
- D. streak

Use the diagram below to answer questions 25-26.



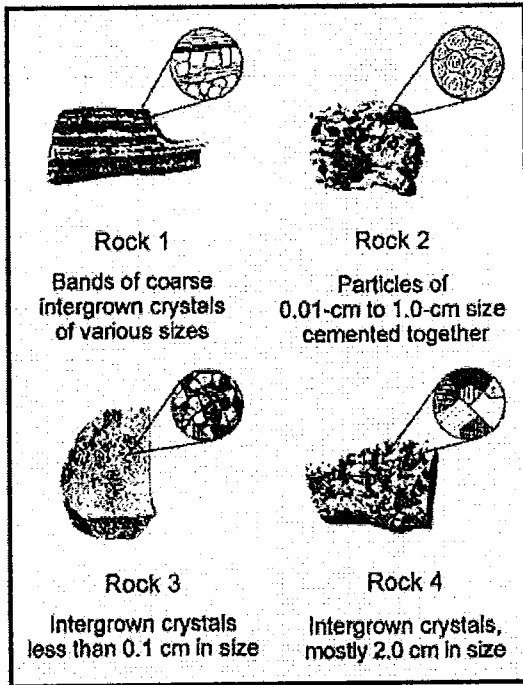
25. Which changes sediment into sedimentary rock?

- A. weathering and erosion
- B. heat and pressure
- C. compaction and cementation
- D. melting

26. Which type of rock forms when magma cools?

- A. sedimentary
- B. chemical
- C. metamorphic
- D. igneous

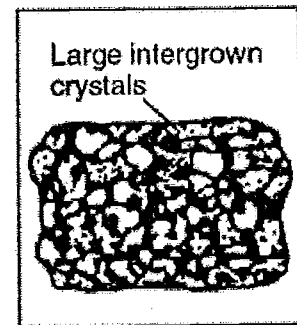
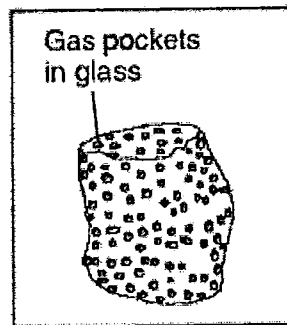
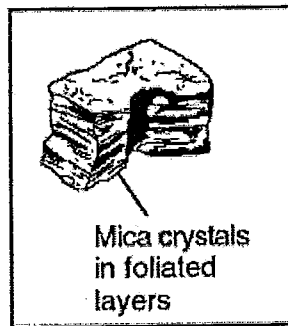
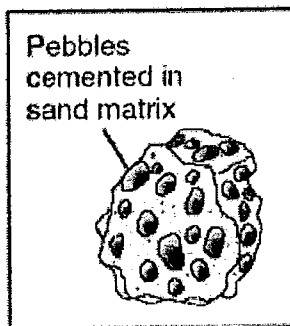
Base your answer to question #27 on the pictures of four rocks shown below.



27. Which rock is metamorphic and shows evidence of foliation?

- A. rock 1
- B. rock 2
- C. rock 3
- D. rock 4

Use the diagram below to answer questions 28-31.



- 28. Put an S under the sedimentary rock.
- 29. Put an E under the extrusive igneous rock.
- 30. Put an M under the metamorphic rock.
- 31. Put a G under the rock that could be granite.

#32-41 -Use the words in the word bank to fill in the blanks in the chart below.

fracture	extrusive	hardness	intrusive
nonfoliated	streak test	organic	foliated
detrital	chemical		

Complete Table 9-1.

Rocks and Minerals	
Minerals	Rocks
Properties of Minerals	Three Types of Rock
• are crystals	Igneous Rock
• have cleavage or a. _____	Two Types:
• can be identified by the b. _____	• d. _____ form on Earth's surface
• have varying levels of c. _____ on a scale from 1 to 10	• e. _____ form below Earth's surface
• some have special properties	Sedimentary Rock
	Three Types:
	• f. _____, _____, _____
	Metamorphic Rock
	Two Types:
	• g. _____, _____

Table 9-1

42. How could you tell the difference between a mineral and a rock?

43. How could you describe the crystals usually found in an igneous rock that has formed above ground?

44. Explain how a rock might move through the rock cycle. Give specific details of it's journey.

